

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1. (Currently Amended) A workflow scheduler graphical user interface program having computer executable instructions stored on a computer-readable medium, the workflow scheduler graphical user interface program having computer executable instructions for utilizing a workflow scheduler graphical user interface program, comprising:
 - code for providing a first screen area of a graphical user interface program employed by a user employed to create a graphical representation of a business workflow process;
 - code for providing a second screen area of a graphical user interface program employed by a user employed to bind the graphical representation of a business workflow process to at least one technological component; and
 - a workflow component menu including a plurality of workflow components employed to create a business workflow process in the first screen area, the plurality of workflow components comprising at least one action component for defining actions in a business workflow process and at least one action grouping component for grouping the at least one action component, the at least one action grouping component being a role component and a transaction component;
 - a separator bar separating the first screen area from the second screen area, the separator bar allows a user to drag a component from the first screen area to the second screen area to create an implementation port on the separator bar;
 - at least one implementation port that couples at least one workflow component to the at least one technological component, the at least one implementation port is created on the separator bar by dragging the at least one technological component into the second screen area using a user selection device;
 - at least one role port that connects an action with an associated role to an implementation port on the separator bar, wherein once an action is associated with the role, a user is prevented from dragging a role to create another role port for associating the same action to the role;
 - a data flow screen that illustrates data flow between the at least one implementation port

and the at least one technological component; and

an editable transaction property screen employed to relate catch code and compensation code to the transaction component, wherein compensation code is invoked on other transaction components upon a failure of a given transaction component and catch code is invoked on the failed transaction component; and
wherein the graphical representation of the business workflow process is converted into XML code.

2-7. (Canceled)

8. (Previously Presented) The computer-readable medium of claim 1, the plurality of workflow components comprising at least one decision component for providing decision control flow to the business workflow process.

9. (Previously Presented) The computer-readable medium of claim 8, further including an editable decision component property screen employed to add and delete rules to the decision component.

10. (Previously Presented) The computer-readable medium of claim 9, further including an editable rule property screen employed to define the rules added to the decision component.

11. (Currently Amended) The computer-readable medium of claim 1, the plurality of workflow components comprising ~~at least one of~~ an action component, an action grouping component, a branching component, a joining component and a decision component.

12. (Previously Presented) The computer-readable medium of claim 1, further comprising a binding component menu including a plurality of technological components employed to bind the graphical representation of the business workflow process to at least one of the plurality of technological components in the second screen area.

13. (Previously Presented) The computer-readable medium of claim 12, further comprising a message editor for each of the plurality of technological components.

14. (Currently Amended) The computer-readable medium of claim 12, the plurality of technological components comprising ~~at least one of~~ a component object model (COM) component, a script component, a message queue component and a schedule component.

15-17. (Canceled)

18. (Currently Amended) The computer-readable medium of claim ~~1~~ 15, further including an editable port references message properties screen employed to reorder implementation ports.

19. (Previously Presented) The computer-readable medium of claim 18, the editable port references message properties screen being further employed to launch an editable port properties screen, the editable port properties screen being employed to at least one of add, delete and edit port messages or arguments.

20. (Previously Presented) The computer-readable medium of claim 1, further including a binding wizard for defining the at least one technological component, the binding wizard being invoked by dragging the at least one technological component into the second screen area with a user selection device.

21. (Canceled)

22. (Currently Amended) A business process scheduling program having computer executable instructions stored on a computer-readable medium, the business process scheduling program ~~having computer executable instructions for employing a business process scheduling program~~, comprising:

a plurality of schedule tool components employed to create a representation of a business process schedule according to a set of predefined rules; ~~and~~

an input screen for inputting interfaces and methods of the plurality of schedule tool

components;

a separator bar for separating the input screen into a first screen area and a second screen area, the separator bar allows a user to drag a schedule tool component from the first screen area to the second screen area to create an implementation port on the separator bar;

at least one implementation port that couples at least one workflow component to the schedule tool component, the at least one implementation port is created on the separator bar by dragging the schedule tool component into the second screen area using a user selection device;

at least one role port that connects an action with an associated role to an implementation port on the separator bar, wherein once an action is associated with the role, a user is prevented from dragging a role to create another role port for associating the same action to the role;

a data flow screen that illustrates data flow between the business process schedule and the plurality of schedule tool components;

a conversion component employed to convert the schedule to ~~XML~~ executable code;

wherein the plurality of schedule tool components comprises at least one action component for defining actions in a business process schedule and at least one action grouping component for grouping the at least one action component, and the action components grouped by the at least one action grouping component are selectable between an associated state and a non-associated state, the at least one action grouping component being a role component and a transaction component; and

an editable transaction property screen employed to relate catch code and compensation code to the transaction component, wherein compensation code is invoked on other transaction components upon a failure of a given transaction component and catch code is invoked on the failed transaction component.

23. (Previously Presented) The computer-readable medium of claim 22, further comprising at least one binding tool component employed to bind the representation of the business process schedule to at least one technological component.

24-27. (Canceled)

28. (Previously Presented) The computer-readable medium of claim 22, a control flow flowing to an action component grouped by an action grouping component having an associated state will automatically connect to a connection point on the action grouping component.

29. (Previously Presented) The computer-readable medium of claim 22, a control flow flowing to an action component grouped by an action grouping component having a non-associated state will allow a direct connection to a connection point on the action component.

30. (Previously Presented) The computer-readable medium of claim 22, an action grouping component having a non-associated state will not have a control handle for directing control flow and an action component having an associated state will have a control handle for directing control flow.

31. (Previously Presented) The computer-readable medium of claim 22, a connection between a first action grouping component having at least one action associated with the first action grouping component and a second action grouping component having at least one action associated with the second action grouping component will automatically generate a first grouping component port on the first action grouping component and a second grouping component port on the second action grouping component and a communication message coupling the first grouping component port to the second grouping component port.

32. (Previously Presented) The computer-readable medium of claim 31, deletion of one of the first action grouping component and the second action grouping component creates an implementation port of the deleted action grouping component on a separator bar.

33. (Previously Presented) The computer-readable medium of claim 22, a control flow flowing from an action component grouped by an action grouping component having an associated state to an implementation port will automatically create a grouping component port on an edge of the action grouping component.

34. (Previously Presented) The computer-readable medium of claim 22, the at least one action grouping component allowing only a single control flow to flow into the at least one action grouping component.
35. (Previously Presented) The computer-readable medium of claim 34, the at least one action grouping component being a transaction component and further including at least one of a catch code and a compensation code related to the transaction component.
36. (Previously Presented) The computer-readable medium of claim 35, the transaction component being limited to two nesting levels.
37. (Previously Presented) The computer-readable medium of claim 22, the plurality of schedule tool components comprising at least one decision component having at least one non-editable rule.
38. (Previously Presented) The computer-readable medium of claim 37, the at least one decision component allowing for the addition of other rules.
39. (Currently Amended) A computer readable medium having computer-executable instructions for performing the steps comprising:
- code for providing a first screen region that is employed by a user to create displaying a screen having a first region employed to create a representation of a business workflow process and providing a second screen region that is employed by a user to bind the business process workflow representation a second region employed to bind the representation of a business workflow process to a representation of at least one technological component; and
- displaying a separator bar between the first screen area and the second screen area, the separator bar allows a user to drag a technological component from the first screen area to the second screen area to create an implementation port on the separator bar;
- displaying a workflow component menu having a plurality of workflow components employed to create a business workflow process in the first screen region, the plurality of workflow components comprising at least one action component for defining actions in a

business workflow process and at least one action grouping component for grouping the at least one action component, the at least one action grouping component being a role component and a transaction component;

retrieving and displaying an implementation port image employed to bind a technological component to a component in a business workflow process in response to a user selecting one of the plurality of technological components and dragging the component into the second screen area using a user selection device;

retrieving and displaying at least one role port that connects an action with an associated role to an implementation port on the separator bar, wherein once an action is associated with the role, a user is prevented from dragging a role to create another role port for associating the same action to the role;

displaying a data flow screen that illustrates data flow between the at least one implementation port and the at least one technological component; and

displaying an editable transaction property screen employed to relate catch code and compensation code to the transaction component, wherein compensation code is invoked on other transaction components upon a failure of a given transaction component and catch code is invoked on the failed transaction component; and

wherein the representation of the business workflow process is converted into XML code.

40-41. (Canceled)

42. (Previously Presented) The computer readable medium of claim 39, further including the step of retrieving and inserting an image into the first screen area of a selected one of the plurality of workflow components in response to a user selecting the component and dragging the component into the first screen area using a user selection device.

43. (Canceled)

44. (Previously Presented) The computer readable medium of claim 39, further including the step of displaying an editable decision component property screen employed to add and delete rules to a decision component in response to a user selecting a decision component residing in

the first screen area using a user selection device.

45. (Previously Presented) The computer readable medium of claim 44, further including the step of displaying an editable rule property screen employed to define the rules added to the decision component in response to a user selecting a button on the editable decision component property screen using a user selection device.

46. (Previously Presented) The computer readable medium of claim 39, further comprising the step of displaying a binding component menu including a plurality of technological components employed to bind the graphical representation of the business workflow process to at least one of the plurality of technological components.

47. (Previously Presented) The computer readable medium of claim 46, further including the step of displaying a message editor in response to a user selecting one of the plurality of technological components and dragging the component into the second screen area using a user selection device.

48. (Previously Presented) The computer readable medium of claim 46, further including the step of displaying a binding wizard in response to a user selecting one of the plurality of technological components and dragging the component into the second screen area using a user selection device.

49. (Canceled)

50. (Previously Presented) The computer readable medium of claim 46, further including the step of displaying an editable port references message properties screen employed to reorder implementation ports.

51. (Previously Presented) The computer readable medium of claim 50, further including the step of launching an editable port properties screen, the editable port properties screen employed to at least one of add, delete and edit port messages or arguments.

52. (Canceled)

53. (Currently Amended) A system comprising computer hardware for executing the following software components, the system that facilitates modeling of business processes that are representable at a transaction level and an action level, the system is recorded on a computer-readable medium and capable of execution by a computer, comprising:

a graphical user interface;

a plurality of modeling components accessible through the graphical user interface and employed to create a graphical representation of a business process and a binding of the business process to at least one technological component;

at least a portion of the plurality of modeling components residing on a workflow component menu employed to create the graphical representation of a business workflow process in a first screen area;

at least a portion of the plurality of modeling components residing on a binding component menu employed to create a binding to the graphical representation of the business workflow process in a second screen area;

a separator bar separating the first screen area from the second screen area, the separator bar allows a user to drag a technological component from the first screen area to the second screen area to create an implementation port on the separator bar;

at least one implementation port coupling at least one component of the graphical representation of the business process to the technological component, the at least one implementation port is created on the separator bar by dragging the at least one technological component into the second screen area using a user selection device; and

at least one role port that connects an action with an associated role to an implementation port on the separator bar, wherein once an action is associated with the role, a user is prevented from dragging a role to create another role port for associating the same action to the role;

a data flow screen illustrating data flow between the implementation port and the technological component; and

wherein the graphical representation of the business workflow process is converted into XML code.

54-58. (Canceled)

59. (Currently Amended) A graphical user interface program having computer executable instructions stored on a computer readable medium ~~comprising computer executable instructions~~, the graphical user interface program comprising:

means for allowing a user to create a graphical representation of a business process;

means for providing an input screen for inputting interfaces and methods of at least one technological component;

means for displaying a separator bar for separating the input screen into a first screen area and a second screen area, the separator bar allows a user to drag a technological component from the first screen area to the second screen area to create an implementation port on the separator bar;

means for allowing a user to create a binding of the graphical representation of the business process to at least one technological component; ~~and~~

means for allowing a user to create a workflow component menu including a plurality of workflow components employed to create a business workflow process, the plurality of workflow components comprising at least one action component for defining actions in a business workflow process and at least one action grouping component for grouping the at least one action component, the at least one action grouping component being a role component and a transaction component;

means for retrieving and displaying an implementation port image employed to bind a technological component to a component in a business workflow process in response to a user selecting one of the technological components and dragging the component into the second screen area using a user selection device;

means for retrieving and displaying at least one role port that connects an action with an associated role to an implementation port on the separator bar, wherein once an action is associated with the role, a user is prevented from dragging a role to create another role port for associating the same action to the role;

means for viewing data flow between the means for coupling and the at least one technological component; and

means for displaying an editable transaction property screen employed to relate catch code and compensation code to the transaction component, wherein compensation code is invoked on other transaction components upon a failure of a given transaction component and catch code is invoked on the failed transaction component; and
wherein the representation of the business workflow process is converted into XML code.

60-62. (Canceled)